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DATE MAILED: 12/31/2008

## NOTICE OF ALLOWANCE AND FEE(S) DUE

27367 7590 12/31/2008 WESTMAN CHAMPLIN & KELLY, P.A. SUITE 1400 900 SECOND AVENUE SOUTH

MINNEAPOLIS, MN 55402-3244

EXAMINER

OLSEN, KAJ K

ART UNIT PAPER NUMBER

1705

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/607,856	06/27/2003	Pavel Shuk	R302.12-0062	7101
TITLE OF INVENTION: S	ULFUR RESISTANT SENS	ORS		

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	03/31/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 1SI. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and I/2 the ISSUE FFE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

#### PART B - FEE(S) TRANSMITTAL

# Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This appropriate. All further indicated unless correcte maintenance fee notifical	form should be used to correspondence including d below or directed off tions.	for transmitting the E ng the Patent, advance nerwise in Block 1, b	SSUE FEE and PUBLIC e orders and notification y (a) specifying a new o	of n	ON FEE (if require naintenance fees wil pondence address; a	d). Bi I be n nd/or	locks 1 through 5 sh nailed to the current (b) indicating a sepa	ould be completed where correspondence address as rate "FEE ADDRESS" for
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MINNEAPOLIS	, MN 55402-3244							(Depositor's name)
				╙				(Signature)
				L				(Date)
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nonprovisional	NO	\$1510	\$300		\$0		\$1810	03/31/2009
EXAM	INER	ART UNIT	CLASS-SUBCLASS					
OLSEN,		1795	204-424000		•			
"Fee Address" ind PTO/SB/47; Rev 03-0 Number is required. 3. ASSIGNEE NAME A	ondence address (or Cha 3/122) attached. ication (or "Fee Address 2 or more recent) attach ND RESIDENCE DAT. ess an assignce is ident h in 37 CFR 3.11. Comp	inge of Correspondence " Indication form and. Use of a Custome A TO BE PRINTED C	(2) the name of a sregistered attorney 2 registered patent listed, no name will by THE PATENT (print or	ip to nativ single or a attor Il be or typ he pa	e firm (having as a n agent) and the names meys or agents. If no printed. te) atent. If an assignee assignment.	nembe of up name	ra 2to is 3	cument has been filed for
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	s SMALL ENTITY state	as. See 37 CFR 1.27.					ITY status. See 37 CF	
NOTE: The Issue Fee an interest as shown by the	d Publication Fee (if req records of the United Sta	uired) will not be acce ites Patent and Traden	epted from anyone other th nark Office.	nan th	he applicant; a registe	ered at	torney or agent; or th	e assignee or other party in
Authorized Signature					Date			
Typed or printed name					Registration No.			
This collection of inform an application. Confident submitting the complete this form and/or suggesti Box 1450, Alexandria, V Alexandria, Virginia 223	ation is required by 37 C itality is governed by 35 I application form to the ons for reducing this bu irginia 22313-1450. DO 13-1450.	CFR 1.311. The inform U.S.C. 122 and 37 C. USPTO. Time will v rden, should be sent to D NOT SEND FEES C	nation is required to obtain FR 1.14. This collection is vary depending upon the ison the Chief Information O OR COMPLETED FORM	or n s esti indiv iffice S TC	etain a benefit by the imated to take 12 mi idual case. Any com r, U.S. Patent and Ti D THIS ADDRESS:	public nutes iments radem: SEND	c which is to file (and to complete, including on the amount of tin ark Office, U.S. Depa TO: Commissioner f	by the USPTO to process) g gathering, preparing, and he you require to complete rtment of Commerce, P.O. or Patents, P.O. Box 1450,

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## UNITED STATES PATENT AND TRADEMARK OFFICE

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WESTMAN CH.	AMPLIN & KELLY	OLSEN, KAJ K			
SUITE 1400		ART UNIT	PAPER NUMBER		
900 SECOND AVENUE SOUTH MINNEAPOLIS, MN 55402-3244			1795 DATE MAILED: 12/31/2008		

## Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 722 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 722 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

## Notice of Allowability

Application No.	Applicant(s)	
10/607,856	SHUK ET AL.	
Examiner	Art Unit	
KAJ K. OLSEN	1795	

The MAILING DATE of this communication appears on the cover sheet with the correspondence address All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. Th NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the ini of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.  1. ☑ This communication is responsive to the IDS of 10/7/2008.  2. ☑ The allowed claim(s) is/are 23-27 and 29.  3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
2. ⊠ The allowed claim(s) is/are <u>23-27 and 29.</u> 3. ∐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some* c) None of the:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No
<ol> <li>Cipies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>Certified copies not received:</li> </ol>
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.
4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.  (a)   including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached  1)   hereto or 2)   to Paper No./Mail Date  (b)   including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date  Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.
Attachment(s)
1. ☐ Notice of References Cited (PTO-892)  5. ☐ Notice of Informal Patent Application
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948) 6. ☐ Interview Summary (PTO-413), Paper No./Mail Date
3. ဩ Information Disclosure Statements (PTO/SB/08), 7. ☐ Examiner's Amendment/Comment Paper No./Mail Date 10/7/2008 4. ☐ Examiner's Comment Regarding Requirement for Deposit 8. ☒ Examiner's Statement of Reasons for Allowance
of Biological Material  9. ☐ Other

#### REASONS FOR ALLOWANCE

The following is an examiner's statement of reasons for allowance: Claims 23-27 and 29
remain allowable of the prior art for the reasons set forth in the previous Notice of Allowance.
None of the cited art on the International Search Report teaches or renders obvious the
cumulative limitations of claim 23 with particular attention to the ceria solid solution doped with
at least one mixed valency element.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KAJ K. OLSEN whose telephone number is (571)272-1344. The examiner can normally be reached on M-F 5:30-2:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam X. Nguyen can be reached on 571-272-1342. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Art Unit: 1795

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kaj K Olsen/ Primary Examiner, Art Unit 1795 January 1, 2009